

We Claim:

1 1. A method for determining a power level of a forward-link signal in a wireless
2 system, the method comprising the steps of:

3 determining a plurality of power-indicative signal characteristic of the signal; and

4 determining the power level of the signal for a measurement interval using the power-
5 indicative signal characteristics, the measurement interval having a duration smaller than or
6 equal to the time period in which at least one power-indicative signal characteristic can
7 change.

1 2. The method of claim 1, wherein the measurement interval has a duration smaller
2 than or equal to the time period in which any of power-indicative signal characteristics can
3 change.

1 3. The method of claim 1, wherein the power-indicative signal characteristics
2 comprise an information rate of the signal.

1 4. The method of claim 1, wherein the power-indicative signal characteristics
2 comprise a gain of the signal as determined by the signal's individual power control.

1 5. The method of claim 1, wherein the power-indicative signal characteristics
2 comprise whether the information contained in the signal is control information.

1 6. The method of claim 1, wherein the power-indicative signal characteristics
2 comprise whether the call is in set up.

1 7. The method of claim 1, wherein the power-indicative signal characteristics
2 comprise whether the call is in soft-handoff.

660680-52258600

8. A method for determining a power level of a set of forward-link signals transmitted by a base station in a wireless system, the method comprising the step of:

determining a plurality of power-indicative signal characteristic of each of the signal in the signal set;

determining the power level of the each of the signals for a measurement interval using the power-indicative signal characteristics, the measurement interval having a duration smaller than or equal to the time period in which at least one power-indicative signal characteristic can change; and

determining the power level of the signal set the measurement interval using the power levels of each of the signals.

9. The method of claim 8, wherein the measurement interval has a duration smaller than or equal to the time period in which any of power-indicative signal characteristics can change.

10. The method of claim 8, wherein:

the step of determining the power level of the each of the signals in the signal set comprises, in a channel unit controller:

obtaining an information rate of a signal and a gain of the signal as determined by the signal's individual power control;

multiplying the information rate of the signal and the gain squared of the signal to obtain the power level of the signal; and

forwarding the power level each signal to a master controller; and

the step of the determining the power level of the signal set comprises summing the power level of each signal in a master controller.

11. The method of claim 8, wherein the step of determining the power level of the each of the signals in the signal comprises, in a master controller:

3 obtaining an information rate of a signal and a gain of the signal as determined by the
4 signal's individual power control; and

5 multiplying the information rate of the signal and the gain squared of the signal to
6 obtain the power level of the signal.

1 12. The method of claim 8, wherein the power-indicative signal characteristics
2 comprise an information rate of the signal.

1 13. The method of claim 8, wherein the power-indicative signal characteristics
2 comprise a gain of the signal as determined by the signal's individual power control.

1 14. The method of claim 8, wherein the power-indicative signal characteristics
2 comprise whether the information contained in the signal is control information.

1 15. The method of claim 8, wherein the power-indicative signal characteristics
2 comprise whether the call is in set up.

1 16. The method of claim 8, wherein the power-indicative signal characteristics
2 comprise whether the call is in soft-handoff.

1 17. The method of claim 8, wherein the signal set comprises all the signals in a
2 sector of a cell in which the base station is located.

1 18. The method of claim 8, wherein the signal set comprises all the signals
2 amplified by an amplifier of the base station.

1 19. The method of claim 8, wherein the signal set comprises a plurality of traffic
2 signals.

1 20. The method of claim 8, wherein the signal set comprises a plurality of traffic
2 signals and at least one control signal.

1 21. The method of claim 8, wherein the measurement interval comprises a frame.

1 22. The method of claim 8, wherein the measurement interval comprises a power
2 control group.

660E30 52453E60